

6. That porcelain vessels are preferable to those of gold, silver or platinum for the ignition of ammonium paratungstate and tungstic acid.

7. That the oxidation of metal (method 2) leads to reliable atomic numbers when the material is pure.

8. That tungsten hexachloride can be completely transposed into pure oxide with water and a little nitric acid.

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THE RIPENING OF THOUGHTS IN COMMON.

“Common Sense is Thoughts in Common.”

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Those who are entangled in official or commercial life, and, indeed, observant persons generally, will recall many instances in their daily experiences when they have mentioned a name only to see its owner appear. Or they have a friend, say, in the Straits Settlements. After a long silence they begin to worry about him and sit down to write to him. While they are thus engaged the postman hands in an epistle from Singapore signed with his name.

There is, of course, an element of chance in such coincidences. A vast number spring out of deep-seated, normal biological conditions. It is not here denied that many, associated with abnormal or hypersensitive conditions, are so startling in time and detail as to give rise to beliefs in telepathy.

Leaving out the causes just mentioned, this paper will be confined to those artificialities of life called culture, though the natural causes mix freely with these.

The purposeful actions of all humanity have become so artificialized as to make the natural, physical man subservient to the new man, the *Homo sapiens*. Racial activities and community experiences have entirely changed, so that coincidences in speech, manners, customs, and arts, however surprising they may be, are also due to the maturing of thoughts, desires and purposes held in

common. And such agreements are not exceptions but are numberless.

Similarities and simultaneities in actions and thoughts among millions of persons form an unconscious never-ending drill, the activities passing imperceptibly from voluntarism into automatism. The coincidences of which notice is taken are not a drop in the bucket to the whole number.

I shall speak of thoughts in common and the activities linked with them under the heads of *biology, speech, industries, fine art social life, learning and lore, and religion.*

BIOLOGY.

To begin with activities that are purely biological, thoughts in common are shared with the animals. The revolution of the earth on its axis, producing day and night, causes nature to awaken in concert in the morning and to fall asleep in unison in the evening. There is no leader to the orchestra in the former, nor authoritative command or lullaby in the latter.

With the change of seasons concerted movements of large masses of insects, fishes, birds, and mammals take place, lasting many days and extending over vast distances and spaces. Under other influences hidden from our knowledge, the whole animate creation seems possessed of individual will only to work in obedience to a common will.

This fact was observed three thousand years ago, for one of the Hebrew proverbs reads, "The locusts have no king, yet they go forth all of them by bands" (Prov. xxx. 27).

This moving in concert has a more complex kind of action still, a sort of international code, existing between creatures of different species, genera, orders, families and even between the kingdoms of nature. It resembles a purposeful selection and is the natural forerunner of altruism in culture. It is the hotbed of suggestion for the whole series of psychical mysteries.

These maturings of thoughts in common are deep-seated in the human frame. "As quick as a wink" does not mean a sudden period of capricious length, but one of duration as regular as the ticking of a watch. The physiologists, with their delicate apparatus, have made wonderful discoveries in this direction. All sorts of clever tricks are played on crowds successfully in the domain of psychology through these uniformities of action in biology.

SPEECH.

The first and easily overlooked occasion of thoughts in common is speech. Each word or phrase, and even whole sentences, have generic as well as specific meanings. Through the former they have acquired the habit of making like impressions on a multitude of minds or of calling forth identical responses. Through their specific, esoteric meanings they appeal to a smaller following, but more intensively.

Every association or tribe has such formulæ, and their instantaneous power of allaying the individual thought and merging the single into the organized opinion is a matter of common knowledge. Amid the multifarious capabilities of the vocal apparatus a small number of products are chosen, not by a committee, through laborious and purposeful efforts, but by the committee of the whole, which never adjourns.

In some families of tribes, only the easy, musical, phonic elements are picked out; while in others not far away, the harsh or guttural sounds are preferred.

It has often been declared that these subtle combinations of breathings are more persistent than walls of brick and stone. This is not difficult to believe, since the verbal expressions that survive among a people body forth the imperishable thoughts and prejudices that long ago passed from the evanescent stage in the single mind to the fixed stage in the tribal mind. The charge of plagiarism is frequently made by literary critics when the authors were totally unknown to each other.

The great value of this potent *vox populi*, in this case *vox dei* also, for fixing standard vocabulary and grammar cannot be overestimated. It needs no mysterious telepathy to account for such phenomena. They are grounded in the law of association, in the clan organism, and, since biological endurance is a fixed quantity, they ripen together.

INDUSTRIES.

The common and widespread interests in the activities of life, called industries, give rise to much simultaneity and identity of mental operations. Children go to school in common, the laboring class move to their employments as one.

In the country they have a fashion of cutting a mark in the south kitchen window to note the noon hour. All housewives watch the

shadow of the window frame as it falls there and blow the dinner horn. You can imagine a wave of this joyful sound sweeping across the continent every day from ocean to ocean, and its precisely similar effects on the spirits and bodies of millions on the farms, constituting an aggregate appetite. In precisely the same way the social and political life is agitated, and yet men are amazed to find themselves warming up on the same topics.

In Washington City there are fifty thousand employees. They go to their work at a certain signal. Just at standard noon the whistles blow and they simultaneously and without consultation drop their work. There is a story going around of an old cabinet-maker in one of the Departments, who was so punctual in this regard that once when he was driving a nail and the whistle commenced to blow, he left his hatchet up in the air, like Mohammed's coffin, and went to his lunch.

It is often said that women are governed by instinct, but men by reason. The former share more thoughts in common, they are more conservative, even in savagery. So the actions performed over and over pass into semi-automatism, and without notice the thoughts associated with them arise together in many minds. Even the thoughts go in sets and cliques, and one will awaken the rest by association.

Now and then in the industrial world, through the pleadings of environment, the inspiration of genius, the intense rivalries of trade, new tools, devices, processes and products, and new harness for the forces of nature are devised. The purely original in these are the exceptions, not the rule of action; and, besides, there is more survival than new creation in any one of them, as the suits for interference in the Patent Office will demonstrate.

FINE ART.

The æsthetic faculty affords, with its schools and even national styles, most wonderful examples of the force of emotions felt in common. Canons of criticising the methods of appealing to the senses may be defined as expressions of the thoughts which artists of a certain epoch or school have come to hold in association. The same faculty becomes mixed with social life and gives rise to fashions and styles. Hence they say you might as well be out of the world as out of fashion.

It will be asked whether this community among the agents and

agencies of enjoyment accounts for otherwise inexplicable concurrences in art expression. The foundation of art, as of all other human actions, is laid in nature. That artists without consulting one another should copy this or that feature of the world around them is not surprising.

But art is limited in execution. Tennyson's prayer,

"I would that my tongue could utter
The thoughts that arise in me,"

has been breathed by every artist that ever lived. Fatigued with failure he falls back on his fellow-workers, on the habits of the guild, on conventionalism, which is art-methods in common. It is wonderful how far and wide, and how long these survive. When a student of form in design, familiar with scrolls and frets in Grecian art, discovers the same forms wrought out on Pima Indian basketry and lacework, he lifts his hands with surprise. The ethnologist knows that the Indian woman has not necessarily held converse with the countrymen of Phidias. He realizes that the Pima woman is in the preparatory school, of which the Greek artists were full graduates. Once upon a time Grecian women wove into perishable basketry (*ξαναστρα*) forms that have never died and which their descendants fixed imperishably in marble.

Besides the throng of specially endowed creators of art forms coöperating to their origin and perpetuation, there is a united, I almost said organized, admiration-in-common by the enjoyers or consumers of art products. Their habits of judgment, or canons, are intensified and fixed by custom.

SOCIAL LIFE.

The phrase "social life" is here used in its most comprehensive sense, taking in the sources of all artificial activities performed by persons working unitedly. Two men managing a canoe down a rapid are intensely social; any rupture in the common thought would be fatal. Social organizations furnish the occasion for growth in what is here under consideration. They are like propagating gardens, farms, or stock ranges, where plants and animals are raised in vastly greater numbers than nature unaided would produce.

It would do no violence to partnerships, corporations, trades unions, and guilds in the industrial world; to secret societies, clubs,

and associations for cultivating the true, the beautiful, and the good, in the moral and intellectual world ; to the family, the clan, the tribe, the state, the nation, in the regulative world, with parliaments, courts, administrations, armies and navies, to characterize them as institutions for creating and preserving mental activities in common—popular legislatures that never adjourn. They afford also fields for their operation. When coincidences occur under their sway, the causes lie in the very nature of society from the beginning.

It is an error to think that social structures and their demands become simplified as one descends from civilization, through barbarism, to savagery. The abundant studies of Major Powell and his colleagues among the tribes of America, and of Morgan among savages in general, teach the contrary. Assuming that social structures and functions among these tribes are in the main types found in all primitive societies in the past, it is not difficult to understand how at the very outset the first society developed a vast number of thoughts in common that have persisted in all ages and areas. To these must be added similar processes originating in races and smaller groups.

Recall how immensely stronger are the character and marks of race than of individuals, how the latter vary in color, stature, viability, number and sex of children, and so on. But the race stature and number of births in males and females, as well as other characteristics of the species, endure.

“ So careful of the type she seems,
So careless of the single life.”

So long has nature moved by measured steps that there have come about not only cosmic thoughts in common, animal *communis sensus*, anthropic or human rhythm of mental action, but also racial idiosyncrasies, national impulses, civic likenesses, industrial coincidences and inventions, and family likenesses. It is common to hear such expressions as “ the times are ripe,” “ the hour has struck,” for this or that scheme, meaning that thoughts, like heads of wheat in summer time, have simultaneously ripened for the harvest. It accounts for revivals, the singing of masses, the frenzy of crowds, and all such phenomena. The man of old who was wise enough to foresee these maturing of thoughts in common was recognized as a seer. If forceful enough he became a prophet, a leader, a reformer, a culture-hero.

LEARNING AND LORE.

Lore is the learning of the folk, the philosophy of savages, the survival of old beliefs and customs into enlightenment—old thoughts in common gone to seed. In form, it is the traditions, songs, proverbial philosophies, ceremonies, and real knowledge of peoples. The lore-thoughts of a people are the most deep-rooted and persistent, because indigenous to their minds. It is said that at the battle of Sebastopol the critical charge was incited by the playing of the Marseillaise, which the old soldiers heard for the first time in years. Anyone who has tried to oppose an absurd popular belief, such as that in the hoop-snake, the retiring of the ground-hog at Candlemas, the marvelous doings of the earwig, and a thousand more, will appreciate what is here insisted on, namely, that the holding of a thought in common intensifies its activity, as in a battery of infinite number of cells.

On the intellectual side, lore has become learning and science is slowly permeating the communal mind and becoming the institutional mind. The personal equation of conservatism still acts as a balance-wheel there, as those who worked for uniform time and better nomenclature, and are now laboring for a uniform alphabet and a standard numeral system, will testify.

The sciences began in the individual observation and were perfected one by one in the institutional mind. Since anthropology is a composite science, using and depending on all others, it will be the last to rise to the dignity of a perfected science. The same is true of all its component sciences.

In the museum one sees the botanist returning with his plants from the field. He has been collecting, he is a collector, these are his collections: his work is in the collective stage.

Next, on long tables, he lays them in heaps, according to certain classific concepts in his mind, he is classifying, he is a systematist: this is his classification. Finally he comes to conclusions, will tell you beforehand what to look for in this or that class. He predicts, he is a philosophic botanist: his work is in the predictive stage. But this has been going on for centuries, with fresh returns to the fields, again and again with brighter eyes and larger experience. At last the organized mind takes up the task, so that the work of each must pass the scrutiny of all.

RELIGION.

So far as it enters the scientific arena, religion has to do with a spirit world and its influence on the world of sense. What is thought in common about that world, its physiography and its inhabitants, especially their activities among men and things, goes by the name of *creed*; what is done in common by men in the organization of society and in conduct responsive to creed is *cult* or *worship*. The most overpowering thoughts in common have belonged to the realm of religion. Things change and thoughts with them, not rapidly but surely. The unseen is not known to change, is believed not to change. The words of Paul, "For the things which are seen are temporal; but the things which are not seen are eternal," embody a thought common to all races and ages, and have held all humanity in lines of conduct more firmly than the teachings of experience.

To sum up, similar words and actions arise among men, spontaneously and incessantly, not so much by reason of similar environments and provocations on the spur of the moment as from a psychological cause, the possession of thoughts in common that have come down through the ages and gathered velocity and impetus as they rolled.

If subtle, telepathic influences exist in spiritual connections, they grow out of common thinking, they are the effect, not the cause, of striking coincidences.

To the educator, the reformer, and the legislator, no less than to the investigator, a constant realization of this fact is necessary to success.

To those who listened to this paper, necessarily brief and general, multitudes of instances will arise where strange coincidences in conduct have expressed themselves in every line of activity. If they were not too busily engaged with the affairs of life they would have noticed many more; because with a normally constituted mind and in a completely organized society they are the rule and not the exception.